

**Experiment Number:** 88006-01

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** alpha-Methylstyrene

**CAS Number:** 98-83-9

**Date Report Requested:** 10/17/2014

**Time Report Requested:** 11:18:01

**First Dose M/F:** NA / NA

**Lab:** BNW

**C Number:** C88006B  
**Lock Date:** 03/23/2001  
**Cage Range:** All  
**Date Range:** All  
**Reasons For Removal:** All  
**Removal Date Range:** All  
**Treatment Groups:** All  
**Study Gender:** Both  
**PWG Approval Date** NONE

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:01

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Male  
CONTROL**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
ANIMAL ID	3	3	3	3	3	3	3	3	3	3
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

**Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Hepatodiaphragmatic Nodule								X		1	
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

**Cardiovascular System**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

**Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal    3) Moderate  
2) Mild        4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:01

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Male  
CONTROL**

Parathyroid Gland

+ M + + + + + + + + 9

Pituitary Gland

+ + + + + + + + + + 10

Thyroid Gland

+ + + + + + + + + + 10

**General Body System**

NONE

**Genital System**

Epididymis

+ + + + + + + + + + 9

Preputial Gland

+ + + + + + + + + + 10

Prostate

+ + + + + + + + + + 10

Seminal Vesicle

+ + + + + + + + + + 10

Testes

+ + + + + + + + + + 10

Degeneration

3 1 3.0

**Hematopoietic System**

Bone Marrow

+ + + + + + + + + + 10

Lymph Node, Bronchial

M M + + M M M M M + 3

Lymph Node, Mandibular

M M + M M M M M M 1

Lymph Node, Mediastinal

M + + + M + + M + M 6

Lymph Node, Mesenteric

+ + + + + + + + + + 10

Spleen

+ + + + + + + + + + 10

Thymus

+ + + + + + + + + + 10

**Integumentary System**

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:01

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Male**  
**CONTROL**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| ANIMAL ID   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Integumentary System**

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | M | 9  |
| Skin          | + | + | + | + | + | + | + | + | + | + | 10 |

**Musculoskeletal System**

|      |   |   |   |   |   |   |   |   |   |   |    |
|------|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|----|

**Nervous System**

|       |   |   |   |   |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

**Respiratory System**

|         |   |   |   |   |   |   |   |   |   |   |    |
|---------|---|---|---|---|---|---|---|---|---|---|----|
| Larynx  | + | + | + | + | + | + | + | + | + | + | 10 |
| Lung    | + | + | + | + | + | + | + | + | + | + | 10 |
| Nose    | + | + | + | + | + | + | + | + | + | + | 10 |
| Pleura  | + | + | + | + | + | + | + | + | + | + | 10 |
| Trachea | + | + | + | + | + | + | + | + | + | + | 10 |

**Special Senses System**

|                 |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Eye             | + | + | + | + | + | + | + | + | + | + | 10 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | 10 |

**Urinary System**

|   |   |   |   |   |   |   |   |   |   |   |       |
|---|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney  | + | + | + | + | + | + | + | + | + | + | 10    |
| Cortex, Renal Tubule, Accumulation, Hyaline Droplet | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 1.1 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 88006-01

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** alpha-Methylstyrene

**CAS Number:** 98-83-9

**Date Report Requested:** 10/17/2014

**Time Report Requested:** 11:18:01

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Male  
CONTROL**

| DAY ON TEST                        |   |   |   |   |   |   |   |   |   |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|-----|
|                                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |
| ANIMAL ID                          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |
|                                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |
|                                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |
|                                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   |
|                                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0   |
| <b>*TOTALS</b>                     |   |   |   |   |   |   |   |   |   |     |
| Cortex, Renal Tubule, Regeneration | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 |
| Urinary Bladder                    | + | + | + | + | + | + | + | + | + | 10  |

Cortex, Renal Tubule, Regeneration

1 1 1 1 1 1 1 1 1 1

Urinary Bladder + + + + + + + + + +

Urinary Bladder

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:01

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Male  
75 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| ANIMAL ID   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

Liver

+

10

Hepatodiaphragmatic Nodule

X

1

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

Lymph Node, Mediastinal

+

1

Hemorrhage

4

1 4.0

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:01

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat Male  
75 PPM

| DAY ON TEST |   |   |   |   |   |   |   |   |   |         |
|-------------|---|---|---|---|---|---|---|---|---|---------|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9       |
| ANIMAL ID   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3       |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
|             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2       |
|             |   |   |   |   |   |   |   |   |   | *TOTALS |
|             |   |   |   |   |   |   |   |   |   |         |

Nervous System

NONE

Respiratory System

Nose

+ + + + + + + + + + 10

Special Senses System

Eye

+ 1

Hemorrhage

4 1 4.0

Urinary System

Kidney

+ + + + + + + + + + 10

Cortex, Renal Tubule, Accumulation, Hyaline Droplet

1 1 2 1 1 1 1 2 1 1 10 1.2

Cortex, Renal Tubule, Regeneration

1 1 2 4 1.3

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:01

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat Male  
150 PPM

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Alimentary System

Liver

+ + + + + + + + + + 10

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:01

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat Male  
150 PPM

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Respiratory System

Nose

+ + + + + + + + + + 10

Special Senses System

NONE

Urinary System

Kidney

+ + + + + + + + + + 10

Cortex, Renal Tubule, Accumulation, Hyaline  
Droplet

10

1.3

Cortex, Renal Tubule, Regeneration

1 1 1 1 1 1 1 1 1 1 9 1.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 88006-01

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** alpha-Methylstyrene

**CAS Number:** 98-83-9

**Date Report Requested:** 10/17/2014

**Time Report Requested:** 11:18:01

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Male  
300 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

Liver

+ + + + + + + + + + 10

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat Male  
300 PPM

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Respiratory System

Nose

+ + + + + + + + + + 10

Special Senses System

NONE

Urinary System

Kidney

+ + + + + + + + + + 10

Cortex, Renal Tubule, Accumulation, Hyaline  
Droplet

10

1.1

Cortex, Renal Tubule, Regeneration

1 1 1 1 1 1 1 1 1 1 5 1.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 88006-01

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** alpha-Methylstyrene

**CAS Number:** 98-83-9

**Date Report Requested:** 10/17/2014

**Time Report Requested:** 11:18:02

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Male  
600 PPM**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

|                            |   |   |   |   |   |   |   |   |   |   |       |
|----------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Liver                      | + | + | + | + | + | + | + | + | + | + | 10    |
| Hepatodiaphragmatic Nodule |   |   |   |   |   | X |   |   |   |   | 1     |
| Mesentery                  |   | + |   |   |   |   |   |   |   |   | 1     |
| Fat, Necrosis              |   |   | 3 |   |   |   |   |   |   |   | 1 3.0 |

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 88006-01

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** alpha-Methylstyrene

**CAS Number:** 98-83-9

**Date Report Requested:** 10/17/2014

**Time Report Requested:** 11:18:02

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Male  
600 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

NONE

**Nervous System**

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

Cortex, Renal Tubule, Accumulation, Hyaline Droplet

2 1 2 2 2 2 2 1 2 2 10 1.8

Cortex, Renal Tubule, Regeneration

1 1 1 2 2 1 1 1 1 9 1.2

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Male  
1000 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

**\*TOTALS****Alimentary System**

|                           |   |   |   |   |   |   |   |   |   |   |       |
|---------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | 10    |
| Liver                     | + | + | + | + | + | + | + | + | + | + | 10    |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | 10    |
| Atrophy                   | 1 |   |   |   |   |   |   |   |   |   | 1 1.0 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | 10    |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart        | + | + | + | + | + | + | + | + | + | + | 10 |

**Endocrine System**

|                    |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex     | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla    | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal    3) Moderate  
 2) Mild        4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Male  
1000 PPM**

| DAY ON TEST | 0 0 0 0 0 0 0 0 0 0 |   |   |   |   |   |   |   |   |   |
|-------------|---------------------|---|---|---|---|---|---|---|---|---|
|             | 0 0 0 0 0 0 0 0 0 0 |   |   |   |   |   |   |   |   |   |
|             | 9 9 9 9 9 9 9 9 9 9 |   |   |   |   |   |   |   |   |   |
|             | 3                   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *TOTALS     |                     |   |   |   |   |   |   |   |   |   |

Parathyroid Gland

+ + M + + M M + + + 7

Pituitary Gland

+ + + + + + + + + + 10

Thyroid Gland

+ + + + + + + + + + 10

**General Body System**

NONE

**Genital System**

Epididymis

+ + + + + + + + + + 10

Preputial Gland

+ + + + + + + + + + 10

Prostate

+ + + + + + + + + + 10

Seminal Vesicle

+ + + + + + + + + + 10

Testes

+ + + + + + + + + + 10

**Hematopoietic System**

Bone Marrow

+ + + + + + + + + + 10

Lymph Node, Bronchial

+ M M M M + M M M M M 2

Lymph Node, Mandibular

M M M M M M M M M M 0

Lymph Node, Mediastinal

M M + + + + + M + + 7

Lymph Node, Mesenteric

+ + + + + + + + + + 10

Spleen

+ + + + + + + + + + 10

Thymus

+ + + + + + + + + + 10

**Integumentary System**

Mammary Gland

+ + M + M + + + + M 7

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Male  
1000 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

**\*TOTALS**

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | M | + | M | + | + | + | + | M | 7  |
| Skin          | + | + | + | + | + | + | + | + | + | + | 10 |

**Musculoskeletal System**

|      |   |   |   |   |   |   |   |   |   |   |    |
|------|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|----|

**Nervous System**

|       |   |   |   |   |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

**Respiratory System**

|              |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|----|
| Larynx       | + | + | + | + | + | + | + | + | + | + | 10 |
| Foreign Body |   | X |   |   |   |   |   |   |   |   | 1  |
| Lung         | + | + | + | + | + | + | + | + | + | + | 10 |
| Nose         | + | + | + | + | + | + | + | + | + | + | 10 |
| Pleura       | + | + | + | + | + | + | + | + | + | + | 10 |
| Trachea      | + | + | + | + | + | + | + | + | + | + | 10 |

**Special Senses System**

|                 |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Eye             | + | + | + | + | + | + | + | + | + | + | 10 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | 10 |

**Urinary System**

|   |   |   |   |   |   |   |   |   |   |   |     |
|---|---|---|---|---|---|---|---|---|---|---|-----|
| Kidney  | + | + | + | + | + | + | + | + | + | + | 10  |
| Cortex, Renal Tubule, Accumulation, Hyaline Droplet | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 10  |
|   |   |   |   |   |   |   |   |   |   |   | 1.7 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 88006-01

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** alpha-Methylstyrene

**CAS Number:** 98-83-9

**Date Report Requested:** 10/17/2014

**Time Report Requested:** 11:18:02

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Male  
1000 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

|                                    |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|
| Cortex, Renal Tubule, Regeneration | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| Urinary Bladder                    | + | + | + | + | + | + | + | + | + | + |

8

1.1

\*\*\*END OF MALE DATA\*\*\*

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
CONTROL**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| ANIMAL ID   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

|                           |   |   |   |   |   |   |   |   |   |     |    |
|---------------------------|---|---|---|---|---|---|---|---|---|-----|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | +   | 10 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | +   | 10 |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | +   | 10 |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | +   | 10 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | +   | 10 |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | +   | 10 |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | +   | 10 |
| Liver                     | + | + | + | + | + | + | + | + | + | +   | 10 |
| Mesentery                 |   |   |   |   |   |   | + |   |   |     | 1  |
| Fat, Necrosis             |   |   |   |   |   | 2 |   |   | 1 | 2.0 |    |
| Pancreas                  | + | + | + | + | + | + | + | + | + | +   | 10 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | +   | 10 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | +   | 10 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | +   | 10 |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart        | + | + | + | + | + | + | + | + | + | + | 10 |

**Endocrine System**

|                 |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex  | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
CONTROL**

| DAY ON TEST                 |   |   |   |   |   |   |   |   |   |       |
|-----------------------------|---|---|---|---|---|---|---|---|---|-------|
|                             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0     |
|                             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0     |
|                             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9     |
| 3                           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3     |
| ANIMAL ID                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0     |
|                             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0     |
|                             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1     |
|                             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1     |
|                             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0     |
| <b>*TOTALS</b>              |   |   |   |   |   |   |   |   |   |       |
| Islets, Pancreatic          | + | + | + | + | + | + | + | + | + | 10    |
| Parathyroid Gland           | + | + | + | M | + | + | + | + | + | 9     |
| Pituitary Gland             | + | + | + | + | + | + | + | + | + | 10    |
| Thyroid Gland               | + | + | + | + | + | + | + | + | + | 10    |
| <b>General Body System</b>  |   |   |   |   |   |   |   |   |   |       |
| NONE                        |   |   |   |   |   |   |   |   |   |       |
| <b>Genital System</b>       |   |   |   |   |   |   |   |   |   |       |
| Clitoral Gland              | + | + | + | + | + | + | + | + | + | 10    |
| Ovary                       | + | + | + | + | + | + | + | + | + | 10    |
| Uterus                      | + | + | + | + | + | + | + | + | + | 10    |
| <b>Hematopoietic System</b> |   |   |   |   |   |   |   |   |   |       |
| Bone Marrow                 | + | + | + | + | + | + | + | + | + | 10    |
| Lymph Node                  |   |   |   |   |   |   |   |   |   | 1     |
| Lymph Node, Bronchial       | + | M | M | + | M | M | M | M | M | 2     |
| Lymph Node, Mandibular      | M | M | M | M | M | M | M | M | M | 0     |
| Lymph Node, Mediastinal     | + | + | + | + | + | + | + | + | M | 9     |
| Lymph Node, Mesenteric      | + | + | + | + | + | + | + | + | + | 10    |
| Spleen                      | + | + | + | + | + | + | + | + | + | 10    |
| Thymus                      | + | + | + | + | + | + | + | + | + | 10    |
| Hemorrhage                  |   |   |   |   |   |   | 1 |   |   | 1 1.0 |
| <b>Integumentary System</b> |   |   |   |   |   |   |   |   |   |       |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
CONTROL**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

  

| ANIMAL ID |   |   |   |   |   |   |   |   |   |   |
|-----------|---|---|---|---|---|---|---|---|---|---|
|           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

**\*TOTALS****Integumentary System**

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Skin          | + | + | + | + | + | + | + | + | + | + | 10 |

**Musculoskeletal System**

|      |   |   |   |   |   |   |   |   |   |   |    |
|------|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|----|

**Nervous System**

|       |   |   |   |   |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

**Respiratory System**

|         |   |   |   |   |   |   |   |   |   |   |    |
|---------|---|---|---|---|---|---|---|---|---|---|----|
| Larynx  | + | + | + | + | + | + | + | + | + | + | 10 |
| Lung    | + | + | + | + | + | + | + | + | + | + | 10 |
| Nose    | + | + | + | + | + | + | + | + | + | + | 10 |
| Pleura  | + | + | + | + | + | + | + | + | + | + | 10 |
| Trachea | + | + | + | + | + | + | + | + | + | + | 10 |

**Special Senses System**

|                 |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Eye             | + | + | + | + | + | + | + | + | + | + | 10 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | 10 |

**Urinary System**

|                 |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Kidney          | + | + | + | + | + | + | + | + | + | + | 10 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
75 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

Liver + + + + + + + + + 10

Hepatodiaphragmatic Nodule X X 2

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

Ovary + 1  
Cyst 4 1 4.0

**Hematopoietic System**

Lymph Node, Mediastinal + 1  
Hemorrhage 2 1 2.0  
Lymph Node, Mesenteric + 1  
Hyperplasia, Lymphoid 3 1 3.0

**Integumentary System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 88006-01

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** alpha-Methylstyrene

**CAS Number:** 98-83-9

**Date Report Requested:** 10/17/2014

**Time Report Requested:** 11:18:02

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Female  
75 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Musculoskeletal System**

NONE

**Nervous System**

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

1 2.0

Infiltration Cellular, Histiocyte

2

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

1 2.0

Inflammation, Chronic Active

2

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 88006-01

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** alpha-Methylstyrene

**CAS Number:** 98-83-9

**Date Report Requested:** 10/17/2014

**Time Report Requested:** 11:18:02

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Female  
150 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

Liver

+

+

+

+

+

+

+

+

+

+

10

Hepatodiaphragmatic Nodule

X

1

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal
- 3) Moderate
- 2) Mild
- 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
150 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

Cortex, Renal Tubule, Regeneration

1 1 1 3 1.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat Female  
300 PPM

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Alimentary System

Liver

+ + + + + + + + + + 10

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
300 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Respiratory System**

|                     |   |   |   |   |   |   |   |   |   |   |    |       |
|---------------------|---|---|---|---|---|---|---|---|---|---|----|-------|
| Nose                | + | + | + | + | + | + | + | + | + | + | 10 |       |
| Pleura              |   |   |   |   |   |   |   |   |   |   | +  | 1     |
| Inflammation, Focal |   |   |   |   |   |   |   |   |   |   | 2  | 1 2.0 |

**Special Senses System**

NONE

**Urinary System**

|                                    |   |   |   |   |   |   |   |   |   |   |       |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney                             | + | + | + | + | + | + | + | + | + | + | 10    |
| Cortex, Renal Tubule, Regeneration | 1 | 1 |   |   |   |   |   |   |   |   | 3 1.0 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
600 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9           | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 3           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9           | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |

\*TOTALS

**Alimentary System**

Liver

+ + + + + + + + + + 10

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
600 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9           | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 3           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9           | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |

\*TOTALS

**Respiratory System**

Nose

+ + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

Cortex, Renal Tubule, Regeneration

1 1 2 1.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:02

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
1000 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

|                            |   |   |   |   |   |   |   |   |   |   |    |
|----------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                  | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Cecum     | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon     | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum    | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Duodenum  | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum     | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Jejunum   | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver                      | + | + | + | + | + | + | + | + | + | + | 10 |
| Hepatodiaphragmatic Nodule |   |   |   |   |   |   |   | X |   | 1 |    |
| Pancreas                   | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands            | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach       | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular         | + | + | + | + | + | + | + | + | + | + | 10 |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart        | + | + | + | + | + | + | + | + | + | + | 10 |

**Endocrine System**

|                    |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex     | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla    | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:03

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
1000 PPM**

| DAY ON TEST | 0 0 0 0 0 0 0 0 0 0 |   |   |   |   |   |   |   |   |   |
|-------------|---------------------|---|---|---|---|---|---|---|---|---|
|             | 0 0 0 0 0 0 0 0 0 0 |   |   |   |   |   |   |   |   |   |
|             | 9 9 9 9 9 9 9 9 9 9 |   |   |   |   |   |   |   |   |   |
|             | 3                   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

**\*TOTALS**

|                   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------|---|---|---|---|---|---|---|---|---|---|----|
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Pituitary Gland   | + | + | + | + | + | + | + | + | + | + | 10 |
| Thyroid Gland     | + | + | + | + | + | + | + | + | + | + | 10 |

**General Body System**

NONE

**Genital System**

|                      |   |   |   |   |   |   |   |   |   |   |       |
|----------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Clitoral Gland       | + | + | + | + | + | + | + | + | + | + | 10    |
| Ovary                | + | + | + | + | + | + | + | + | + | + | 10    |
| Cyst                 |   |   |   |   | 1 |   |   |   |   |   | 1 1.0 |
| Periovary Tiss, Cyst |   |   |   |   |   |   |   | 2 |   |   | 1 2.0 |
| Uterus               | + | + | + | + | + | + | + | + | + | + | 10    |

**Hematopoietic System**

|                         |   |   |   |   |   |   |   |   |   |   |    |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow             | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Bronchial   | M | M | M | M | M | M | M | M | M | M | 0  |
| Lymph Node, Mandibular  | M | M | M | M | M | M | M | M | M | M | 0  |
| Lymph Node, Mediastinal | + | M | + | + | + | + | + | + | + | + | 9  |
| Lymph Node, Mesenteric  | + | + | + | + | + | + | + | + | + | + | 10 |
| Spleen                  | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus                  | + | + | + | + | + | + | + | + | + | + | 10 |

**Integumentary System**

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
|---------------|---|---|---|---|---|---|---|---|---|---|----|

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal    3) Moderate  
2) Mild        4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:03

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
1000 PPM**

| DAY ON TEST                                 |                |   |   |   |   |   |   |   |   |       |
|---|----------------|---|---|---|---|---|---|---|---|-------|
|   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0     |
|   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0     |
|   | 9              | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9     |
| 3   | 3              | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3     |
| ANIMAL ID                                   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0     |
|   | 1              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1     |
|   | 1              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1     |
|   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1     |
|   | 1              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0     |
|   | <b>*TOTALS</b> |   |   |   |   |   |   |   |   |       |
| Mammary Gland                               | +              | + | + | + | + | + | + | + | + | 10    |
| Skin  | +              | + | + | + | + | + | + | + | + | 10    |
| <b>Musculoskeletal System</b>               |                |   |   |   |   |   |   |   |   |       |
| Bone  | +              | + | + | + | + | + | + | + | + | 10    |
| <b>Nervous System</b>                       |                |   |   |   |   |   |   |   |   |       |
| Brain                                       | +              | + | + | + | + | + | + | + | + | 10    |
| <b>Respiratory System</b>                   |                |   |   |   |   |   |   |   |   |       |
| Larynx                                      | +              | + | + | + | + | + | + | + | + | 10    |
| Lung  | +              | + | + | + | + | + | + | + | + | 10    |
| Alveolus, Fibrosis                          |                |   |   |   |   |   | 1 |   |   | 1 1.0 |
| Alveolus, Infiltration Cellular, Histiocyte |                | 1 |   |   |   | 1 |   |   |   | 2 1.0 |
| Nose  | +              | + | + | + | + | + | + | + | + | 10    |
| Pleura                                      | +              | + | + | + | + | + | + | + | + | 10    |
| Trachea                                     | +              | + | + | + | + | + | + | + | + | 10    |
| <b>Special Senses System</b>                |                |   |   |   |   |   |   |   |   |       |
| Ear   |                |   |   |   |   |   | + |   |   | 1     |
| Eye   | +              | + | + | + | + | + | + | + | + | 10    |
| Harderian Gland                             | +              | + | + | + | + | + | + | + | + | 10    |
| <b>Urinary System</b>                       |                |   |   |   |   |   |   |   |   |       |
| Kidney                                      | +              | + | + | + | + | + | + | + | + | 10    |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 88006-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha-Methylstyrene

CAS Number: 98-83-9

Date Report Requested: 10/17/2014

Time Report Requested: 11:18:03

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
1000 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

\*TOTALS

|                                    |   |   |     |   |   |   |   |   |   |   |       |
|------------------------------------|---|---|-----|---|---|---|---|---|---|---|-------|
| Cortex, Renal Tubule, Regeneration | 1 | 1 | 1.0 |   |   |   |   |   |   |   |       |
| Urinary Bladder                    | + | + | +   | + | + | + | + | + | + | + | 10    |
| Hemorrhage                         |   | 1 |     |   |   |   |   |   |   |   | 1 1.0 |
| Transit Epithe, Erosion            |   | 1 |     |   |   |   |   |   |   |   | 1 1.0 |

\*\* END OF REPORT \*\*

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked